



New City Primary School Computing Policy 2018-2019

Policy Creation and Review	
Author(s)	Rosemary Hayes
Last Review Date	June 2018
Ratified by Governing Body	
Next Review Date	June 2019

<u>Contents</u>

Introductionpg	3
Aimspg	3
National Curriculum for Computingpg	3
Computing at New City Primarypg	g 5
Entitlementpg	g 6
Implementationpg	6
Assessmentpg	7
Managementpg	7
Reviewpg	7
Background	7
Internet Access and Online-Safetypg	8

Introduction:

The use of Computing is an integral part of the National Curriculum and is a key skill for everyday life. Computers, IPads, programmable robots, digital and video cameras are but a few of the tools that can be used to acquire, organise, store, manipulate, interpret, communicate and present information. At New City Primary School we recognise that pupils are entitled to quality hardware and software and a structured and progressive approach to the learning of the skills needed to enable them to become Computing proficient.

<u>Aims:</u>

- Provide a relevant, challenging and enjoyable Computing curriculum for all pupils.
- Meet the requirements of the National Curriculum programmes of study for Computing.
- Use Computing as a tool to enhance learning throughout the curriculum.
- To respond to new developments in technology.
- To equip pupils with the confidence and capability to use Computing throughout their later life.
- To enhance learning in other areas of the curriculum using computational skills.
- To develop an understanding of how to use Computing safely and responsibly.

The National Curriculum for Computing aims to ensure that all pupils:

• Can understand and apply the fundamental principles of computer science, including logic, algorithms, data representation, and communication.

• Can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems.

• Can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems.

• Are responsible, competent, confident and creative users of digital devices and the Internet.

<u>Rationale:</u>

The school believes that Computing:

• Gives pupils immediate access to a rich source of materials.

• Can present information in new ways which help pupils understand access and use it more readily.

- Can motivate and enthuse pupils.
- Can help pupils focus and concentrate.
- Offers potential for effective group working.
- Has the flexibility to meet the individual needs and abilities of each pupil.

Objectives Early years:

It is important in the Foundation Stage to give children a broad, play-based experience of Computing in a range of contexts, including outdoor play. Computing is not just about computers. Early years learning environments should feature Computing scenarios based on experience in the real world, such as in role play. Children gain confidence, control and language skills through opportunities to explore using non-computer based resources such as metal detectors, controllable traffic lights and walkie-talkie sets. Recording devices can support children to develop their communication skills. This is particular useful with children who have English as an additional language.

• Key stage 1 Pupils should be taught to:

- Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions
- Create and debug simple programs
- Use logical reasoning to predict the behaviour of simple programs
- Use technology purposefully to create, organise, store, manipulate and retrieve digital content
- Recognise common uses of information technology beyond school
- Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

• Key stage 2 Pupils should be taught to:

- Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.
- Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.
- Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.
- Understand computer networks including the internet; how they can provide multiple services, such as the World Wide Web; and the opportunities they offer for communication and collaboration.
- Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.
- Select, use and combine a variety of software (including Internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.
- Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Computing at New City Primary School

New City Primary School believes that Computing is an integral part of the Teaching and Learning across the entire curriculum. We are a well-resourced school with laptops, IPads, recording devices, programmable toys and interactive whiteboards available to support the delivery of high quality Computing lessons. The laptops have the software required to deliver the computing curriculum through the planned Programmes of Study. All computers are networked and linked to the Internet. The school has an 'Acceptable use of the Internet' Policy, which Parents/Guardians are asked to agree to, before their child uses the Internet.

<u>Entitlement</u>

The pupil's entitlement to Computing is based upon the Programmes of Study for Computing as defined in the 2016 National Curriculum. The schemes of work used to deliver these programmes of study are:

- Online Safety Planned by teachers, supported with LGfL Resources.
- Computer Programming Rising Stars
- Presentational skills Rising Stars

From Years 1-6 children will study the following:

-Online Safety

-Computer Programming

-Presentation skills

In EYFS children will have access to a wide range of technology to support their journey to reaching the Early Learning Goals. Equipment will include laptops, programmable toys and recording devices.

Implementation

Pupils will have the opportunity to develop their Computing capability in the core and foundation subjects. For details of specific applications, see the 2016 National Curriculum for all other curriculum areas. Opportunities provided by the class teacher will enable the children to work both individually and in small groups. For all Computing lessons the teacher will ensure that interactive strategies are used; teacher modelling is used; introductions are included and plenary sessions are incorporated to meet the learning objectives as per the Teaching Timeline in the Teaching and Learning policy.

In this school, pupils will have experience with networked PCs, printers, Bee-Bots, Pixies, data logging equipment, sensing equipment, calculators, digital media, Interactive Whiteboards, laptops and voting systems. They will also have experience with the Internet and a variety of software that allows teachers to provide for progression of skills, concepts and applications.

As an inclusive school, Computing is made accessible to children with Special Educational Needs, by providing them with suitable software and tasks, and with extra support in the use of software packages and peripherals available.

In Computing lessons, pupils with specific learning needs also have access to, where appropriate:

- Visual prompts to engage and increase attention.
- Real objects to explore and manipulate.
- Symbols for key vocabulary.
- Opportunities for repetition, to consolidate and reassure.
- Opportunities to use special interests where appropriate.
- Support where necessary to develop new skills

Assessment

The pupil's work in Computing is assessed continuously throughout the topics that are taught. Records are kept in the form of teacher evaluations, saved work in the Student Hand-In folder and recorded data on Pupil Tracker. Each class across Year groups 1-6 also have evidence folders containing pupils' work and evaluations from lessons. A range of abilities are usually targeted and every pupil in the school will be accessed throughout the academic year. Teacher assessments, including the end of year level achieved, are reported to parents in the annual reports, and assessments are passed on to the next class teacher. Pupils are actively encouraged to use Bug Club and Mathletics to support their English and Maths skills.

<u>Management</u>

The Computing Curriculum Leader and Senior Management are responsible for the implementation of this Policy; the management and repairs of Computing resources through School Based Curriculum Support, monitoring Computing standards of achievement and progression, and working with SLT to arrange appropriate Inset for all members of staff where necessary. New City is committed to continuing the reliability of the network. Ben Philips is currently employed as Computing Technician by the school to support with technical matters. The Class Teachers are responsible for the delivery of this policy and the care and security of the hardware and software. The school is committed to the ongoing resourcing of Computing equipment and software, in relation to the School Development Plan. The school is responsible for ensuring that copyright regulations are not infringed.

<u>Review</u>

The policy will be reviewed annually with the aim of meeting any new developments and initiatives both nationally and locally.

Background Information:

This policy was drafted by the Curriculum Leader for Computing; implemented SLT; presented to the whole staff for discussion; redrafted and agreed. It is reviewed on a regular basis.

Internet Access and Online-safety

All pupils must have returned a signed consent form for them to use the internet. (Letters are available at the Reception desk. These are completed during the admission interview.)

Although Internet access within school is protected by the borough Firewall and Filtering systems as well as the school's own security system. The risks of Internet use are still present. We believe it is vital to teach Online-safety as part of the Computing curriculum. This is embedded into each unit by the class teachers through personalised planning adapted from the 'Switched On' Rising Stars Units of Work.

Mathletics, Bug Club and the MLE

In recent years there has been a boom in the education opportunities that are available online. We have bought into the following to give pupils safe access to online educational opportunities outside of school. These are:

- London MLE
- Mathletics
- Bug Club
- LGfL MyUSO

All pupils have passwords that can be used to access these sites. Pupils have been shown how to use them and how to keep their passwords safe from others. The Computing Co-ordinator's role, alongside the technician, includes restricting the pupil's access to areas of the MLE that are aimed for them and this helps the pupils stay safe online. Staff are encouraged to use the MLE as a cross curricular tool to support.

<u>Copyright</u>

New City Primary School has a responsibility to teach and uphold the laws and guidance on copyright. Images on the Internet are not freely available and we have a responsibility to teach children how to check and use information and images appropriately. These are the currently recommended sites:

Microsoft Office clipart now includes photos and moving images. These are allowed to be used if not for profit.

Rosemary Hayes New City Primary School Computing Curriculum Co-ordinator

June 2018 Review June 2019